

Specification

5 Paragraph at page 9, lines 10-29:

Since the density of the implant damage follows a generally Gaussian (bell-shaped) profile, multiple implants are preferably performed to different ranges of acceleration energies in the sub-collector to establish a more uniform ion distribution, and accordingly a more uniform degree of insulation. For example, if hydrogen ions (protons) are employed, three different implants to principle ranges of 0.5, 0.3 and 0.1 microns, using respective acceleration energies of 500, 300 and 100 kV, could be employed. The result is illustrated in FIG. 12. Rather than a Gaussian ion distribution, illustrated by dashed curve 46 47 centered in the middle of the sub-collector 4, three Gaussian ion distributions 48a, 48b, 48c would be established. The overall ion distribution, representing the sum of the three implant distributions 48a, 48b, 48c, would be more uniform through the depth of the sub-collector than the single implant distribution 46 47. The ion implant could be performed when the sub-collector is first formed, rather than following etch patterning.